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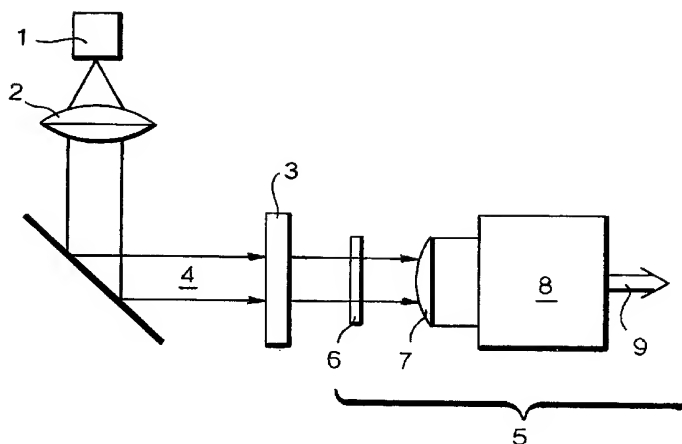
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(54) Title: SURFACE SHAPE MEASUREMENT APPARATUS AND METHOD



(57) Abstract: Apparatus for indicating the departure of a shape of an object (3; 11; 16; 18; 22; 26) from a specified shape is described. The apparatus comprises radiation means for directing an incident beam of radiation (4) onto the object, and inspecting means (5) for inspecting the final beam after transmission by or reflection from said object. The apparatus is arranged so that the final beam will have a substantially planar wavefront when said object has said specified shape, and said inspecting means (5) is arranged to determine any departure of the wavefront of the final beam from planarity. In one embodiment, the inspecting means comprises beamsplitting means, for example a diffraction grating (6) or hologram, and detector means such as a CCD camera (8). The beamsplitting means is then arranged to split the final beam into two or more beams and to direct said two or more beams to laterally displaced locations on the detector means.

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